

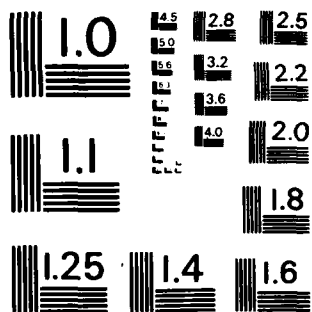
JUSTIFICATION OF ESTIMATES FOR FISCAL YEAR 1985  
SUBMITTED TO CONGRESS FEB. (U) DEPUTY CHIEF OF STAFF  
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MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS-1963-A

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# DEPARTMENT OF THE AIR FORCE

JUSTIFICATION OF ESTIMATES FOR FISCAL YEAR 1985  
SUBMITTED TO CONGRESS FEBRUARY 1984



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Missile Procurement, Air Force

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DEPARTMENT OF THE AIR FORCE

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*Missile Procurement, Air Force*  
*including transfer of funds*

MISSILE PROCUREMENT, AIR FORCE  
[[Including Transfer of Funds]]

For construction, procurement, and modification of missiles, spacecraft, rockets, and related equipment, including spare parts and accessories therefor, ground handling equipment, and training devices; expansion of public and private plants, Government-owned equipment and installation thereof in such plants, erection of structures, and acquisition of land ~~without regard to section 9774 of title 10, United States Code~~ for the foregoing purposes, and such lands and interests therein, may be acquired and construction prosecuted ~~thereon~~ prior to approval of title ~~as~~ required by Section 355, Revised Statutes, as amended; plant and Government and contractor-owned equipment layaway; and other expenses necessary for the foregoing purposes including rents and transportation ~~of things~~;

\$7,747,838,000, of which \$81,600,000 shall be available for the purchase of the phase III Defense Satellite Communications System (DSCS III) under a multiyear contract: Provided, That after the Secretary of the Air Force gives written notification of a proposed multiyear contract for the Defense Satellite Communications System to the Committees on Appropriations of the Senate and House of Representatives, such contract may not then be awarded until forty-five days after such notification; and of which \$200,000,000 for cooperative NATO air base defense shall not be available to support implementing an agreement with any foreign government until forty-five days after such agreement, together with supporting data including total program cost estimates, has been submitted to the Congress; and in addition, \$55,000,000 to be derived by transfer from "Missile Procurement, Air Force, 1983/1985" \$9,820,600,000, to remain available for obligation until September 30, ~~1986~~ 1987. (5 U.S.C. 3109; 10 U.S.C. 1905, 2271-79, 2363, 2386, 2653, 2672, 2672a, 8012, 8062, 9501-02, 9531-32, 9741-42; 50 U.S.C. 451, 453, 455; Department of Defense Appropriation Act 1984; additional authorizing legislation to be proposed.

3020f Missile Procurement, Air Force  
Program and Financing (in Thousands of dollars)

01 Feb 64  
FYP SUMMARY

		Budget Plan (amounts for actions programmed)			Obligations		
Identification code		1983 actual	1984 est.	1985 est.	1983 actual	1984 est.	1985 est.
Program by Activities							
Direct Program:							
1. Ballistic missiles							
		1,759,090	2,110,188	2,938,900	16,702	1,294,960	2,338,019
2. Other missiles							
		95,210	137,350	162,300	151,528	87,981	150,508
3. Modification of inservice missiles							
		190,000	332,119	639,800	230,536	285,208	522,659
4. Spares and repair parts							
		2,762,300	3,086,293	3,992,700	2,939,134	3,479,147	3,744,511
5. Other support							
Total direct program							
		4,806,600	7,811,838	9,820,600	5,293,498	6,967,331	8,823,582
Reimbursable program							
		246,879	226,800	176,700	235,487	143,894	163,582
10.0001	Total Obligations	5,053,479	8,038,638	9,997,300	5,528,985	7,111,225	8,987,164
Financing:							
Offsetting collections from:							
Federal funds(-)							
11.0001		-243,166	-190,784	-134,568	-239,914	-190,784	-134,568
Trust funds(-)							
13.0001		-3,707	-14,336	-27,012	-2,708	-14,336	-27,012
Non-federal sources(-)							
14.0001		-6	-21,680	-15,120	-14	-21,680	-15,120
Recovery of prior year obligations(-):							
17.0001					-110,276		
Unobligated balance available, start of year							
21.4002	For completion of prior year budget plan				-2,454,561	-2,015,730	-2,943,143
21.4003	Available to finance new budget plans	-35,900	-55,000		-35,900	-55,000	
21.4007	Reprogramming from or to prior year budget	-69,359					
22.4001	Net unobligated balance transferred	48,400			48,400		
Unobligated balance available, end of year							
24.4002	For completion of prior year budget plan				2,015,730	2,943,143	3,983,279
24.4003	Available to finance subsequent year budget	55,000			55,000		
25.0001	Reappropriation	56,859	55,000		56,859	55,000	
39.0001	Budget authority	4,861,600	7,811,838	9,820,600	4,861,600	7,811,838	9,820,600
Budget authority:							
40.0001	Appropriation	4,941,100	7,747,838	9,820,600	4,941,100	7,747,838	9,820,600
40.0002	Reduction pursuant to P.L. 97-377	-21,600			-21,600		
41.0001	Transferred to other accounts(-)	-93,100			-93,100		
42.0001	Transferred from other accounts	20,200	9,000		20,200	9,000	
43.0001	Appropriation (adjusted)	4,846,600	7,756,838	9,820,600	4,846,600	7,756,838	9,820,600
50.0001	Reappropriation	15,000	55,000		15,000	55,000	
Relation of obligations to outlays:							
71.0001	Obligations incurred, net				5,286,349	6,884,425	8,610,464
72.4001	Obligated balance, start of year				2,473,271	4,280,515	6,152,340
74.4001	Obligated balance, end of year				-4,280,515	-6,152,340	-8,388,904
77.0001	Adjustments in expired accounts				14,091		
78.0001	Adjustments in unexpired accounts				-110,276		

30207 Missile Procurement, Air Force  
Program and Financing (in Thousands of dollars)

01 Feb 64

Identification code	57-3020-0-1-051	1963 actual	1964 est.	1965 est.
90 0001 Outlays		3,982,920	5,012,600	6,576,900

3020f Missile Procurement, Air Force  
Object Classification (in Thousands of dollars)

01 Feb 84

Identification code	57-3020-0-1-051	1983 actual	1984 est.	1985 est.
-----				
Direct obligations:				
13 1001	Equipment	5,293,498	6,967,331	8,623,562
19 9001	Total Direct obligations:	5,293,498	6,967,331	8,623,562
-----				
Reimbursable obligations:				
23 1001	Equipment	235,487	143,694	163,562
29 9001	Total Reimbursable obligations:	235,487	143,694	163,562
-----				
99 9901	Total Obligations	5,528,985	7,111,225	8,987,124



3020f Missile Procurement, Air Force  
Program and Financing (in Thousands of dollars)

01 Feb 84  
FISCAL YEAR 1981

Identification code	57-3020-0-1-051	Budget Plan (amounts for actions programmed)			Obligations		
		1983 actual	1984 est.	1985 est.	1983 actual	1984 est.	1985 est.
<b>Program by Activities</b>							
<b>Direct Program:</b>							
1.	Ballistic missiles				2,325		
2.	Other missiles				176,165		
3.	Modification of inservice missiles				37,566		
4.	Spares and repair parts				31,393		
5.	Other support				100,987		
<b>Total direct program</b>					<b>348,456</b>		
<b>Financing:</b>							
<b>Offsetting collections from:</b>							
11.0001	Adjustment to prior year federal fund or				2,718		
13.0001	Adjustment to prior year trust fund or				1,001		
17.0001	Recoveries of prior year obligations(-)				-27,138		
Unobligated balance available, start of year					-375,398		
21.4002	For completion of prior year budget plans						
21.4007	Reprogramming from or to prior year budget pl	-50,359					
22.4001	Net unobligated balance transferred	8,500			8,500		
25.0001	Unobligated balance lapsing	41,859			41,859		
<b>39.0001 Budget authority</b>							

3020f Missile Procurement, Air Force  
Program and Financing (in Thousands of dollars)

01 Feb 84  
FISCAL YEAR 1982

		Budget Plan (amounts for actions programmed)			Obligations		
Identification code	57-3020-0-1-051	1983 actual	1984 est.	1985 est.	1983 actual	1984 est.	1985 est.
Program by Activities							
Direct Program:							
1.	Ballistic missiles				14,377	57,769	
2.	Other missiles				802,106	295,035	
3.	Modification of inservice missiles				32,839	8,131	
4.	Spares and repair parts				64,628	29,566	
5.	Other support				434,319	361,868	
Total direct program					1,368,469	752,369	
Reimbursable program					21,940		
10.0001	Total Obligations				1,390,409	752,369	
Financing:							
Offsetting collections from:							
11.0001	Adjustment to prior year federal fund or				534		
13.0001	Adjustment to prior year trust fund orde				-2		
14.0001	Adjustment to non-federal sources				-8		
17.0001	Recoveries of prior year obligations(-)				-83,138		
Unobligated balance available, start of year							
21.4002	For completion of prior year budget plans				-2,079,163	-752,369	
21.4003	Available to finance new budget plans	-35,900			-35,900		
21.4007	Reprogramming from or to prior year budget pl	-19,000					
22.4001	Net unobligated balance transferred	54,900			54,900		
Unobligated balance available, end of year							
24.4002	For completion of prior year budget plans				752,369		
39.0001	Budget authority						

3020f Missile Procurement, Air Force  
Program and Financing (in thousands of dollars)

01 Feb 84  
FISCAL YEAR 1983

		Budget Plan (amounts for actions programmed)			Obligations		
Identification code	57-3020-0-1-051	1983 actual	1984 est.	1985 est.	1983 actual	1984 est.	1985 est.
Program by Activities							
Direct Program:							
2.	Other missiles	1,759,090			977,327	501,581	280,182
3.	Modification of inservice missiles	95,210			81,101	1,173	12,938
4.	Spares and repair parts	190,000			114,315	48,693	26,992
5.	Other support	2,762,300			2,403,828	173,417	185,055
Total direct program		4,806,600			3,576,571	724,864	505,165
Reimbursable program		246,879			213,547	18,150	15,182
10.0001	Total Obligations	5,053,479			3,790,118	743,014	520,347
Financing:							
Offsetting collections from:							
11.0001	Federal funds(-)	-243,166			-243,166		
13.0001	Trust funds(-)	-3,707			-3,707		
14.0001	Non-federal sources(-)	-6			-6		
Unobligated balance available, start of year							
21.4002	For completion of prior year budget plans					-1,263,361	-520,347
21.4003	Available to finance new budget plans		-55,000			-55,000	
22.4001	Net unobligated balance transferred	-15,000	55,000		-15,000	55,000	
Unobligated balance available, end of year							
24.4002	For completion of prior year budget plans				1,263,361	520,347	
24.4003	Available to finance subsequent year budget	55,000			55,000		
25.0001	Reappropriation	15,000			15,000		
39.0001	Budget authority	4,861,600			4,861,600		
Budget authority:							
40.0001	Appropriation	4,941,100			4,941,100		
40.0002	Reduction pursuant to P.L. 97-377	-21,600			-21,600		
41.0001	Transferred to other accounts(-)	-93,100			-93,100		
42.0001	Transferred from other accounts	20,200			20,200		
43.0001	Appropriation (adjusted)	4,846,600			4,846,600		
50.0001	Reappropriation	15,000			15,000		

3020F Missile Procurement, Air Force  
Program and Financing (in thousands of dollars)

01 Feb 84  
FISCAL YEAR 1984

		Budget Plan (amounts for actions programmed)			Obligations		
Identification code	57-3020-0-1-051	1983 actual	1984 est	1985 est	1983 actual	1984 est	1985 est
Program by Activities							
Direct Program:							
1.	Ballistic missiles		2,110,188			1,237,191	597,265
2.	Other missiles		2,145,688			1,023,419	467,513
3.	Modification of inservice missiles		137,350			78,617	37,982
4.	Spare and repair parts		332,119			206,949	99,906
5.	Other support		3,086,293			2,943,862	272,785
Total direct program			7,811,838			5,490,998	1,475,461
Reimbursable program			226,800			125,744	60,704
10.0001	Total Obligations		8,038,638			5,615,842	1,536,165
Financing:							
Offsetting collections from:							
11.0001	Federal funds(-)		-190,784			-190,784	
13.0001	Trust funds(-)		-14,336			-14,336	
14.0001	Non-federal sources(-)		-21,680			-21,680	
21.4002	Unobligated balance available, start of year						
22.4001	For completion of prior year budget plans						-2,422,796
22.4001	Net unobligated balance transferred		-55,000			-55,000	
24.4002	Unobligated balance available, end of year						
24.4002	For completion of prior year budget plans					2,422,796	886,631
25.0001	Reappropriation		55,000			55,000	
39.0001	Budget authority		7,811,838			7,811,838	
Budget authority:							
40.0001	Appropriation		7,747,838			7,747,838	
42.0001	Transferred from other accounts		9,000			9,000	
43.0001	Appropriation (adjusted)		7,756,838			7,756,838	
50.0001	Reappropriation		55,000			55,000	

3020f Missile Procurement, Air Force  
Program and Financing (in thousands of dollars)

01 Feb 94  
FISCAL YEAR 1984

		Budget Plan (amounts for actions programmed)			Obligations		
Identification code	57-3020-0-1-051	1983 actual	1984 est	1985 est	1983 actual	1984 est	1985 est
Program by Activities							
Direct Program							
1	Ballistic missiles		2,110,188			1,237,191	597,265
2	Other missiles		2,145,888			1,023,419	467,513
3	Modification of inservice missiles		137,350			78,677	37,982
4	Spare and repair parts		332,119			206,949	99,906
5	Other support		3,086,293			2,943,862	272,795
Total direct program			7,811,838			5,490,098	1,475,461
Reimbursable program			226,800			125,744	60,704
10.0001	Total Obligations		8,038,638			5,615,842	1,536,165
Financing:							
Offsetting collections from:							
11.0001	Federal funds(-)		-190,784			-190,784	
13.0001	Trust funds(-)		-14,336			-14,336	
14.0001	Non-federal sources(-)		-21,680			-21,680	
21.4002	Unobligated balance available, start of year						
	For completion of prior year budget plans						-2,422,796
22.4001	Net unobligated balance transferred		-55,000			-55,000	
24.4002	Unobligated balance available, end of year						
	For completion of prior year budget plans					2,422,796	886,631
25.0001	Reappropriation		55,000			55,000	
39.0001	Budget authority		7,811,838			7,811,838	
Budget authority:							
40.0001	Appropriation		7,747,838			7,747,838	
42.0001	Transferred from other accounts		9,000			9,000	
43.0001	Appropriation (adjusted)		7,756,838			7,756,838	
50.0001	Reappropriation		55,000			55,000	

3020f Missile Procurement, Air Force  
Program and Financing (in Thousands of dollars)

01 Feb 84  
FISCAL YEAR 1985

Identification code	57-3020-0-1-051	Budget Plan (amounts for actions programmed)			Obligations		
		1983 actual	1984 est.	1985 est.	1983 actual	1984 est.	1985 est.
Program by Activities							
Direct Program							
1	Ballistic missiles			2,938,900			1,740,754
2	Other missiles			2,086,900			1,320,192
3	Modification of inservice missiles			162,300			99,586
4	Spares and repair parts			639,800			395,761
5	Other support			3,992,700			3,266,661
Total direct program				9,820,600			6,842,956
Reimbursable program				176,700			87,696
10 0001	Total Obligations			9,997,300			6,930,652
Financing:							
Offsetting collections from:							
11 0001	Federal funds(-)			-134,568			-134,568
13 0001	Trust funds(-)			-27,012			-27,012
14 0001	Non-federal sources(-)			-15,120			-15,120
24 4002	Unobligated balance available, end of year						3,066,648
24 4002	For completion of prior year budget plans						
40 0001	Budget Authority (Appropriation)			9,820,600			9,820,600

ACTIVITY: 1. Ballistic Missiles

(In Thousands of Dollars)  
Program Requirement - FY 1986 - \$2,780,438  
Program Requirement - FY 1985 - 2,938,900  
Program Requirement - FY 1984 - 2,110,188  
Program Requirement - FY 1983 - 0

PART I - PURPOSE AND SCOPE

This activity provides for complete operational intercontinental ballistic missiles, including the airframe structure and installed power units, communications guidance and control equipment, re-entry vehicle (excluding nuclear payloads), instruments and auxiliary equipment installed in the missiles, and penetration aids. It also provides for peculiar support equipment in direct support of operational ballistic missiles including ground guidance and control systems, equipment to maintain the operational status of the system, specialized ground handling equipment, and system trainers. The ground equipment is used to transport, assemble and disassemble, maintain, checkout, launch, and guide ballistic missiles. The specialized training equipment includes system trainers for proficiency training of maintenance and operator crews. This activity also provides for the modernization of the ballistic missile launch and launch control facilities and the integration of new equipment into the launch control center. It includes hardware, training equipment, data and site activation effort required to modernize ballistic missile facilities.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The FY 1985 budget request includes funds for 40 Peacekeeper missiles and associated support equipment. The FY 1986 request for authorization includes funds for 48 Peacekeeper missiles. Description and justification for the requests follow:

Peacekeeper - The Peacekeeper is an advanced, multiple independently targetable reentry vehicle ICBM. Present plans are for deployment of 100 Peacekeeper missiles in Minuteman silos. Current ICBM systems are aging and deficient in terms of capability needs required in the late 1980s and 1990s to successfully maintain a high level of deterrence. Peacekeeper subsystems will provide the following improvements over existing Minuteman missiles: an advanced guidance set for improved accuracy; an advanced solid propellant; lightweight motor cases; advanced rocket motor nozzles. Funds are requested in 1985 for procurement of 40 missiles and associated support equipment. The FY 1986 request is for 48 missiles and associated support equipment. (RDT&E PE 64312F, 11215F)

The following tabulation shows the composition of ballistic missile program requirements:

	<u>FY 1983</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
<u>Weapon System</u>				
Peacekeeper	-	\$2,079,600	\$2,938,900	\$2,780,438
ICBM C3 Integration	-	30,588	-	-
TOTAL BUDGET ACTIVITY	-	\$2,110,188	\$2,938,900	\$2,780,438



ACTIVITY: 2. Other Missiles

(In Thousands of Dollars)  
Program Requirements - FY 1986 - \$2,882,408  
Program Requirements - FY 1985 - 2,086,900  
Program Requirements - FY 1984 - 2,145,888  
Program Requirements - FY 1983 - 1,759,090

PART I - PURPOSE AND SCOPE

This activity provides funds for procurement of strategic air-to-ground cruise missiles, tactical ground-to-ground cruise missiles, tactical air-to-air, air-to-ground and ground-to-air missiles and target drones. Weapon system cost includes flyaway costs (airframe, propulsion equipment, electronics and armament), peculiar support equipment (PSE), system peculiar training equipment and publications and technical data.

PART II- JUSTIFICATION OF FUNDS REQUESTED

The FY 1985 budget estimate includes funds for the procurement of the Air Launched Cruise Missile (ALCM) support equipment, the Ground Launched Cruise Missile (GLCM), MAVERICK and HARM air-to-ground missiles, RAPIER and STINGER air base defense missiles, target and tactical drones, and the Advanced Medium Range Air-to-Air Missile (AMRAAM). Descriptions and justification for the requests follow:

AGM-86B, ALCM - The ALCM is a small, long range, accurate, nuclear armed, air-to-ground cruise missile planned for use on the bomber force. The missile is internally guided by an inertial navigation system which is updated by terrain contour matching radar. The ALCM will expand the lethal footprint of penetrating strategic bomber forces by providing additional target coverage and routing flexibility and by stressing enemy defenses. FY 1985 and FY 1986 funds requested will procure ALCM support equipment for B-52 and B-1 bases. Major support equipment items include munitions lift trailers, electronic system test sets, missile radar altimeter test assemblies, loading frames, and pylon loader adapters.

BGM-109, GLCM - The GLCM is a small, long range, accurate, nuclear armed, ground-to-ground cruise missile which will provide increased firepower for non-strategic nuclear forces. FY 1985 funds will cover procurement of 120 missiles, 27 transporter erector launchers (TELs), 16 launch control centers (LCCs) and other support equipment, data, and site activation. The FY 1986 request is for 120 missiles, 27 transporter erector launchers, 16 launch control centers, and associated support equipment.

AGM-130, Powered GBU-15 - The AGM-130 is a product improvement to the GBU-15 bomb. Rocket power is attached to increase standoff range, while preserving the GBU-15 high terminal accuracy, and to expand payload capacity. This tactical air to ground missile will be built in both unitary warhead and dispenser variations. The FY 1986 request for 65 units reflects initial production quantities.

AGM-65D MAVERICK - The MAVERICK is an air-to-ground missile designed to destroy small hard targets during day or night or adverse weather. The AGM-65D version of the missile incorporates Imaging Infrared (IIR), using thermal detection technology to provide an effective 24 hour day/night/adverse weather weapon. The FY 1985 request will procure 4500 missiles. The FY 1986 request is for 8000 missiles.

AGM-88A HARM - The HARM is an air-to-surface anti-radiation missile designed to damage or suppress radar-directed air defense systems. Advanced features include moderate size and weight, high speed, high accuracy, high sensitivity, wideband frequency coverage in a single seeker, long standoff range and the ability to change to different target frequencies while the missile is in flight. The FY 1985 request will procure 871 missiles. The request for FY 1986 is for 1682 missiles.

RAPIER - Rapier is a short range, low level, all weather, surface-to-air defense missile system being acquired to fulfill short range air defense requirements. It is produced in the United Kingdom (UK) and will be used to defend air bases in the UK. The FY 1985 and the FY 1986 request will continue the procurement started in FY 1982.

AMRAAM - The advanced medium range air-to-air missile (AMRAAM) is an AIM-7 Sparrow follow-on air superiority missile, with significant improvements in operational utility and combat effectiveness. Key features which will improve operational utility include: high average missile velocity, more range than the Sparrow, increased maneuverability, multiple target attack, and launch and leave capabilities. The AMRAAM is designed to be compatible with the F-14, F-15, F-16, F-18 and appropriate lead components and manufacturer tooling. AMRAAM fulfills a requirement to improve both US and NATO air-to-air combat capability. The FY 1985 request is for initial procurement of 174 missiles. The FY 1986 request is for 1042 missiles.

STINGER - STINGER is a man-portable, shoulder fired, anti-aircraft missile system for low altitude, short range air defense. Stinger acquisition fulfills requirements for more immediate point air defense capabilities at two Pacific air bases. FY 1985 funds procure an additional 156 missile systems and complete the program.

Target Drones - Target Drones are remotely piloted vehicles which are used to simulate subsonic and supersonic enemy aircraft. They are used to develop air-to-air missile tactics, train aircrews, and to test and evaluate aircraft and missile weapon systems. The funds requested in FY 1985 and FY 1986 will provide for the continued procurement of full scale and sub-scale maneuvering target drones.

Tactical Drones - Details for tactical drones are classified and are provided separately.

HARPOON - The HARPOON is a radar guided anti-ship missile planned for use on B-52G aircraft. This will exploit B-52G conventional capabilities to include sea lane control. FY 1985 funds provide for procurement of 85 missiles and support equipment.

The following table summarizes Other Missiles requirements:

(In Thousands of Dollars)

<u>Weapon System</u>	<u>FY 1983</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Air Launched Cruise Missile (ALCM)	\$ 491,400	\$ 400,476	\$ 74,049	\$ 73,495
Ground Launched Cruise Missile (GLCM)	446,790	580,900	571,126	662,514
NATO Air and Air Base Defense	-	200,000	-	-
AGM-130 Powered GBU-15	-	-	-	50,071
AGM-65D Maverick	243,400	299,965	565,239	716,497
AGM-88A Harm	71,600	175,764	326,284	523,895
Rapier	148,000	62,900	7,561	7,581
Advanced Medium Range Air-to-Air Missile (AMRAAM)	-	57,939	413,035	798,870
Stinger	-	4,901	12,852	-
Target Drones	40,000	29,577	37,540	49,485
Tactical Drones	24,200	48,197	38,872	-
Harpoon	-	-	40,342	-
AIM-7F/M Sparrow	197,200	181,792	-	-
AIM-9L/M Sidewinder	96,500	103,477	-	-
<b>TOTAL BUDGET ACTIVITY</b>	<b>\$1,759,090</b>	<b>\$2,145,888</b>	<b>\$2,086,900</b>	<b>\$2,882,408</b>

ACTIVITY: 3. Modification of In-service Missiles

(In Thousands of Dollars)  
Program Requirements - FY 1986 - \$164,534  
Program Requirements - FY 1985 - 162,300  
Program Requirements - FY 1984 - 137,350  
Program Requirements - FY 1983 - 95,210

PART I - PURPOSE AND SCOPE

This activity provides for modification of missile systems and drones, direct ground support equipment, missile training equipment, and components for this equipment. These costs include modification kits, revised handbooks, and engineering effort. These programs are designed to improve reliability, enhance performance, and increase maintainability by incorporating approved modifications resulting from technical advances, service use, and continuing test programs.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The FY 1985 modification program consists of missile systems Class IV modifications necessary for safety improvements or extension of service life, and Class V modifications, changes that incorporate operational improvements after a missile has been placed in the inventory. Several Class III update modifications are programed to convert missiles to production line configuration. Advances in technology and weapon system service life extensions necessitate the modification of in-service missile systems to enable strategic, tactical, and support forces to maintain superiority over hostile forces.

Class IV Modifications (FY 1985, \$121,399; FY 1986, \$120,874). The FY 1985 program will provide for modifications to improve reliability, maintainability, and extend service life of the AGM-45 Shrike, AIM-9 Sidewinder and LGM-30 Minuteman. Major efforts include the continuation of efforts begun in FY 1983 to insure the logistics support of the Minuteman II guidance unit and Minuteman Launch Facility and Launch Control Facility security systems. Growth in Class IV modifications from FY 1983 into FY 1984/1985/1986 reflects the support problems attributed to aging and increasing difficulty of obtaining spares support for Minuteman missiles and related support equipment. The FY 1986 program will continue modifications on these systems.

#### Class V Modifications

Air Launch Cruise Missile (FY 1985, \$5,726; FY 1986, \$11,296). This program provides for the procurement of modification kits to make the Air Launched Cruise Missile support equipment compatible with the new B-52H Common Strategic Rotary Launcher.

LGM-30 F/G Minuteman II/III (FY 1986, \$8,461). This program initiates modifications for Groundwave Emergency Network connectivity. Procurement of lithium batteries for Minuteman extended survivable power modifications is completed in FY 1984. There are no requirements for Minuteman Class V modifications in FY 1985 at this time.

#### Class III Updates

GLCM Update - (FY 1985, \$26,826; FY 1986, \$16,589). This program will correct deficiencies on missiles revealed during initial operational test and evaluation.

ALCM Update - (FY 1985, \$8,349; FY 1986, \$7,314). This program will correct deficiencies on missiles revealed during initial operational test and evaluation.

The following table summarizes modification requirements:

<u>REQUIREMENT</u>	<u>FY 1983</u>	<u>(In Thousands of Dollars)</u>			<u>FY 1986</u>
		<u>FY 1984</u>	<u>FY 1985</u>		
Class IV Modifications	\$ 47,910	\$ 83,446	\$ 121,399		\$ 120,874
Class V Modifications:					
LGM-30 F/G MINUTEMAN II/III	34,800	23,185			8,461
AGM-86B Air Launched Cruise Missile			5,726		11,296
Class III Update:					
AIM-7F Sparrow	7,700	2,501			
BGM-109 Ground Launched Cruise Missile	3,700	19,318	26,826		16,589
AGM-86B Air Launched Cruise Missile	1,100	8,900	8,349		7,314
TOTAL BUDGET ACTIVITY	\$ 95,210	\$ 137,350	\$ 162,300		\$ 164,534

ACTIVITY: 4. Spares and Repair Parts

(In Thousands of Dollars)  
Program Requirements - FY 1986 - \$596,940  
Program Requirements - FY 1985 - 639,800  
Program Requirements - FY 1984 - 332,119  
Program Requirements - FY 1983 - 190,000

PART I - PURPOSE AND SCOPE

This activity provides for procurement of initial and replenishment spares and repair parts for ballistic missiles, other missiles, target drones, peculiar support equipment, training equipment, replacement equipment, provisioning documentation, and spares for modification programs.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The funds for FY 1985 and FY 1986 will provide for the procurement of initial spares, replacement equipment, and replenishment spares. Initial spares dollar requirements are determined by applying a standard factor, a percentage of recurring flyaway cost derived from experience with similar or related weapon systems. Different factors are developed for several categories of end items. Initial spares requirements are validated in the provisioning process for a specified support period. Initial spares transition to replenishment spares after cataloging, stock number identification and accumulation of demand data. Initial spares are investment type items normally procured in support of the weapon system delivery schedule. Replacement equipment includes peculiar support equipment in support of out-of-production systems, equipment common to several systems, and equipment required by specialized repair activities. Replenishment spares include components and repair parts required for the continued support of missiles, drones and related support equipment maintained in the operational inventory. Requirements for replenishment spares are determined by a computation process (using actual consumption factors and program data) adjusted for non-demand data and assets on hand. The result is a statement of total requirements for repairable items in terms of repair and buy dollars.

A detail break-out of spares and repair parts requirements follows:

	<u>FY 1983</u>	<u>FY 1984</u>	(In Thousands of Dollars)	
			<u>FY 1985</u>	<u>FY 1986</u>
<u>INITIAL SPARES (I/S)</u>				
Maverick	\$ 5,500	\$ 3,118	\$ 13,241	\$ 3,942
Peacekeeper		77,829	232,977	52,481
Air Launched Cruise Missile	11,000	21,761	6,429	
Ground Launched Cruise Missile	8,636	11,102	9,032	4,020
Sparrow	9,700	3,501		
Sidewinder	1,000	974		
HARM	4,000	7,698	11,915	20,786
AMRAAM			17,952	44,041
Target Drones	4,357	1,266	661	376
TOTAL	44,193	127,249	292,207	125,646
MODIFICATION I/S	9,110	3,605	7,334	12,931
REPLACEMENT EQUIPMENT	44,204	68,657	80,227	100,003
REPLENISHMENT SPARES	92,493	132,608	260,032	358,360
TOTAL SPARES & REPAIR PARTS	\$ 190,000	\$ 332,119	\$ 639,800	\$ 596,940

ACTIVITY: 5. Other Support

(In Thousands of Dollars)  
Program Requirements - FY 1986 - \$5,157,215  
Program Requirements - FY 1985 - 3,992,700  
Program Requirements - FY 1984 - 3,086,293  
Program Requirements - FY 1983 - 2,762,300

PART I - PURPOSE AND SCOPE

This activity provides for industrial facilities, space programs, and special programs. Industrial facilities provide for expansion or modification of government-owned production facilities, nonrecurring maintenance and modernization of machine tools and equipment, and preparation, and crating of government tools, improved manufacturing methods, and environmental protection measures instituted at government-owned plants. Space programs provide launch vehicles, space vehicles, peculiar ground support equipment, and miscellaneous launch support requirements other than those chargeable to the Operations and Maintenance appropriation.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The FY 1985 budget request of \$3,992,700 includes \$1,299,232 for operational space programs, \$31,400 for industrial facilities, and \$2,662,068 for special programs. The FY 1986 request for authorization of \$5,157,215 includes \$1,204,818 for operational space programs, \$30,442 for industrial facilities and \$3,921,955 for special programs.

Communications Security (COMSEC) - This program provides communications security on all critical spaceborne communications systems. Funds requested in this line procure COMSEC products for use in operational space programs. This program is an integral part of the national COMSEC program administered by the National Security Agency. FY 1985 and FY 1986 funds provide for the procurement of peculiar anti-jam, data encryption/decryption, command authentication encryption/decryption, authentication anti-jam, and weapon system security communication equipment for space and satellite programs.

NAVSTAR Global Positioning System (GPS) (MYP) - The operational NAVSTAR GPS will consist of 18 satellites, a ground control station and approximately 20,000 sets of user equipment for all services. Users (military aircraft, ships, ground vehicles, and ground personnel) will be able to precisely determine position (to better than 16 meters average accuracy) and velocity (to a few centimeters per second), in three dimensions, anywhere in the world, unimpaird by weather. Such accuracy, unaffected by location or weather and available in real time, will significantly improve the effectiveness of reconnaissance, weapons delivery, countermeasure activity, and rapid deployment for all services. The FY 1985 and FY 1986 funds requested for the operational space segment provide for continuation of the 28 satellite multiyear procurement, fully funding six and nine satellites respectively.



Space Launch Support (MYP) - The Space Launch Support program provides funds for production of Inertial Upper Stage (IUS), Payload Assist Modules-Delta class (PAM-D), and spares support for all Air Force operational space programs (excluding Support Missions) launching on the Space Shuttle. Operational programs include Defense Support Program, Defense Satellite Communications System, and NAVSTAR Global Positioning System. Funds requested in FY 1985 will be used to procure six PAM-D upper stages, two sets of long lead parts for two IUS vehicles to be fully funded in FY 1986 and IUS shipping, spares, software support items. It also procures necessary spares for Interface Verification Equipment, Airborne Support Equipment, and the Vandenberg Air Force Base Shuttle launch processing system. In FY 1986 funds will be requested for: nine PAM-D stages to support Navstar operational launch requirements; purchase of necessary spares for Interface Verification Equipment, Airborne Support Equipment, and the Vandenberg AFB Shuttle launch processing system; procurement of IUS support items including spares and spacecraft and launch vehicle integrating software; and three sets of long lead parts for three IUS vehicles to be fully funded in FY 1987. PAM-D upper stages, for NAVSTAR GPS launch support, are purchased under a multiyear contract with economic production rate advance procurement.

Satellite Data System (SDS) - SDS is a multi-purpose communications system which, in conjunction with the Navy Fleet Satellite Communications Program (FLTSATCOM), has the high priority mission of supporting communications for strategic forces. SDS also supports communications between Air Force Satellite Control Facility ground stations. FY 1984 funds provide continuing launch replenishment and satellite configuration testing. No funds are requested in FY 1985 and FY 1986.

Defense Meteorological Satellite Program (DMSP) (MYP) - DMSP is a joint service program which provides DOD's most important single source of weather data. An advanced weather satellite system supporting both strategic and tactical missions, DMSP satellites provide worldwide, high quality visual and infrared cloud imagery and other specialized meteorological data. Worldwide data are provided to the Air Force Global Weather Central (Offutt AFB, Nebraska) and the Navy's Fleet Numerical Weather Central (Monterey, California). Local area cloud imagery data are transmitted for immediate use directly from the satellites to mobile Air Force and Navy tactical receiving terminals at key worldwide operating locations and onboard aircraft carriers at sea. FY 1985 funding is requested for system integration and test of two sets of parts and selected subassemblies into two satellites. FY 1985 requirements fully fund the second set of two spacecraft and completes the multiyear procurement of four satellites begun in FY 1983. The FY 1985 request includes funding for a microwave imaging sensor, solid rocket motors and propellants, and for an Atlas launch booster modification. FY 1986 contains the last funding to complete Atlas booster modifications for DMSP launches. Other funding in FY 1986 is for an improved sensor power system required to minimize constraints imposed by battery discharge.

Defense Support Program (DSP) - DSP satellites contain sensors which provide near real-time data to the National Command Authority and other designated users. Funds are requested to improve DSP capability to meet mission requirements and increase system and sensor survivability. FY 1985 funding covers spacecraft launch and orbital support and sensor operational support associated with launch of a sensor. Such efforts include launch planning, sensor cleaning, cleanliness verification, satellite pre-shipment testing, and launch team and launch readiness support. Space launch support funding migrates to the operations and maintenance appropriation in FY 1986, except for support peculiar and unique to individual launches. Such peculiar or unique costs remain funded in the appropriation that funds the spacecraft. FY 1986 funding requirements are based on advance procurement of two sets of parts for a two-satellite follow-on buy.

Defense Satellite Communications System (DSCS) (MYP) - DSCS provides Super High Frequency (SHF) satellite communications for secure voice and high data rate transmissions. It satisfies unique and vital national security communications requirements for worldwide military command and control, crises management and relay of intelligence, early warning data, treaty monitoring and surveillance information and diplomatic traffic. The DSCS program consists of a space segment, which is an Air Force responsibility, a multi-user terminal segment for ground, airborne, and naval elements, and an operational control segment. The authorized DSCS space segment consists of four operational and two in-orbit spare satellites positioned in geosynchronous orbits to provide global (less polar) coverage. Existing DSCS II satellites will be replenished with DSCS III satellites. DSCS III provides increased capacity, flexibility, and anti-jam capability. DSCS III satellites will include an Air Force Satellite Communications System single channel transponder for Emergency Action Message dissemination. FY 1984 funds provide for economic order rate multiyear procurement of piece parts for seven DSCS III satellites to be acquired on a multiyear procurement to be initiated in FY 1985. FY 1985 funds continue a multiyear procurement of seven DSCS III satellites: production of the first two satellites is fully funded in FY 1985 with production and funding programed at a rate of two per year to FY 1988. FY 1988 fully funds the last satellite of the buy initiated in FY 1985. FY 1985 also contains economic order quantity advance procurement for the balance of piece parts for the remaining five satellites. Advance procurement in FY 1986 is for subcontractor piece part assembly and test for the last three satellites.

Air Force Satellite Communications System (AFSATCOM) - AFSATCOM is a satellite based ultra high frequency (UHF) communications system. AFSATCOM transponders are carried as payloads on host spacecraft. AFSATCOM provides a communications system between the National Command Authorities, the JCS, the military CINCs, and nuclear capable forces. FY 1984 and FY 1986 requests each procure one transponder for a classified host spacecraft. Transponder requirements are determined by the need to sustain the AFSATCOM mission until MILSTAR becomes operational.

Space Boosters - The Space Boosters program has provided an austere, expendable launch vehicle back-up to guarantee launch of critical USAF operational payloads in the event that the Space Shuttle orbiter fleet is grounded. Current funding provides for maintenance of critical Titan III production support capability and initial production line phase-down and close-out efforts. Although actual production line work was terminated in April 1983, some residual production support costs will be incurred until launch of the last Titan III booster in inventory, expected in FY 1988. Termination will progress through phase-down to close-out because of the need to support the booster inventory acquired to date. Initial phase-down and close-out efforts were funded in FY 1983, given demonstrated Space Shuttle reliability. No FY 1984 funding is requested since FY 1983 funding will cover expected phase-down and close-out costs through September 1984. FY 1985 funding is requested to complete phase-down efforts and provide residual inventory support for the booster airframe and rocket motors. Funding in FY 1986 will be requested for airframe and rocket motor close-out. An FY 1988 request will complete close-out and fund final booster termination costs. No funding requirement is presently anticipated for FY 1987.

Space Defense System - This program line represents acquisition of the US antisatellite (ASAT) weapon system. ASAT is composed of a miniature vehicle (MV) final stage designed to destroy a target satellite, a two-stage SRAM/ALTAIR missile to boost the MV to target altitude, and a modified air defense F-15 to launch the missile. ASAT will be deployed at two CONUS air defense bases. FY 1984, the first year of procurement funding, allows for long lead advance procurement of parts for lower stages. FY 1985 fully funds lower stages and provides for long lead advance procurement of additional sets of parts for lower stages programed to be fully funded in FY 1986.

Space Shuttle - The Space Shuttle is a NASA development program to provide an advanced, reusable, manned orbiter vehicle which will be capable of transporting payloads to low earth orbit. To carry payloads to higher operational orbits, the Air Force is building the unmanned Inertial Upper Stage (IUS). By Executive direction, the Air Force will: 1) provide a shuttle launch and landing capability at Vandenberg AFB, CA; 2) develop the Inertial Upper Stage; 3) transition DOD payloads to the shuttle; 4) support NASA development efforts and make sure the shuttle meets DOD requirements. IUS, procured for DOD launches under the Space Launch Support line, was originally developed in the Space Shuttle program. Funding in FY 1983 and FY 1984 completes acquisition of airborne support equipment (ASE). ASE represents reusable mission equipment common to several types of spacecraft and is acquired to integrate spacecraft and the Shuttle. Such equipment is necessary to support satellites from time of loading in the orbiter cargo bay, through Shuttle launch, to time of satellite separation and launch from the orbiter. FY 1984 through FY 1986 funding completes acquisition of ground support equipment (GSE) required to support operation of Vandenberg AFB Shuttle launch and landing site facilities. Funding in FY 1985 also completes procurement of ground support equipment for a secure mission control center at Johnson Space Flight Center, security of Tracking and Data Relay Satellite System (TDRSS) operations for AF/DOD missions at Goddard Space Flight Center, and security for classified Shuttle operations at Cape Canaveral AFS.

A summary of the funding requirements for space programs:

	<u>FY 1983</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
COMSEC	\$ 13,100	\$ 23,472	\$ 32,739	\$ 36,535
NAVSTAR GPS (MYP)	111,500	237,114	332,278	227,180
Space Launch Support (MYP)	128,200	137,490	208,039	329,808
Satellite Data System	22,304	24,823	0	0
Defense Meteorological Satellite Program (MYP)	166,800	33,608	139,909	58,121
Defense Support Program	396,900	352,830	48,850	209,207
Defense Satellite Communications System (MYP)	180,300	115,704	291,238	149,530
Air Force Satellite Communications System	28,400	30,393	0	34,468
Space Boosters	61,700	0	25,310	6,911
Space Defense System	0	19,309	82,997	128,931
Space Shuttle	135,000	192,991	137,872	24,127
TOTAL SPACE PROGRAMS	\$1,244,204	\$1,167,734	\$1,299,232	\$1,204,818

Industrial Facilities (FY 85, \$31,400; FY 86, \$30,442). Industrial Facilities requirements represent Air Force aerospace industry modernization efforts frequently described as industrial responsiveness or industrial preparedness. Industrial Facilities efforts focus on these goals: minimize the industrial resources (manpower, materials, time, energy) necessary to produce and support programed force equipment; promote both a prime contractor and sub-contractor capability necessary to support, quickly and efficiently, foreseeable military requirements; provide a deterrent to conflict through the perceived strength and readiness of the industrial base. The combined intent of these goals is to improve US defense industry capability for efficient peacetime production, peacetime surge, and partial, full or total mobilization. Modernization efforts approach these goals by identifying and establishing a priority list of problems and opportunities, refining and improving acquisition to encourage private investment, investing where industry can't or won't, and by maintaining government facilities and equipment necessary to meet unique military requirements. Major components of the program are outlined in the following profile:

<u>COMPONENT</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Expansions	5.8	0.5	1.5
Packing, Crating, Handling	0.1	1.3	0.5
Capital Type Rehabilitation	2.2	4.6	4.1
Manufacturing Technology	0	0	8.3
Industrial Base Planning	0.1	0.7	0.7
Environmental Protection	7.6	13.5	7.8
Industrial Productivity & Responsiveness Improvement	9.9	9.2	5.8
Energy Conservation	0	1.6	1.7
<b>TOTAL</b>	<b>25.7</b>	<b>31.4</b>	<b>30.4</b>

Summary of changes between years: Levels of funding by category depend on the relative priority of projects and changes in requirements over time.

- Expansions: FY 1984 funds an AMRAAM assembly and check-out project; FY 1985 funding is for modifications to existing facilities and addresses no new projects; FY 1986 funding is projected for staging area, storage magazine, and equipment maintenance projects.

- Packing, Crating, Handling: FY 1985 requirements continue phase-out projects and an increased number of equipment removals.

- Capital Rehabilitation: Increases in FY 1985 and FY 1986 are for specific real property rehabilitation projects.
- Manufacturing Technology: FY 1986 funds projects which have successfully passed the engineering, testing, and evaluation phase.
- Industrial Base Planning: Increases reflect a new emphasis on industrial production base analyses to more effectively identify problems and opportunities to develop an efficient and responsive industrial base.
- Environmental Protection: FY 1985 funds specific projects at AFP 44, Tucson, AZ, (\$9.470 million) and other projects. Additional FY 1985 and FY 1986 requirements are for projects designed to clean up or protect the environment generated because of increased environmental awareness and the Comprehensive Environmental Response Compensation and Liability Act.
- Industrial Productivity & Responsiveness Improvement: Tactical missile requirements decline in FY 1986 and new initiatives are undertaken in support of strategic missile and guidance sectors of the industrial base.
- Energy Conservation: Funding in FY 1985 is for a Phase III Energy Monitoring and Control System project (\$1.0 million) at AFP 44 and six other projects at AFP 44 and AFP 78.

Special Programs (FY 1985, \$2,662,068; FY 1986, \$3,921,955). Special Program requirements are of a sensitive nature and require special access.

COMPARISON OF FY 1984 PROGRAM REQUIREMENTS AS REFLECTED  
IN FY 1984 BUDGET WITH FY 1984 PROGRAM REQUIREMENTS AS  
SHOWN IN FY 1985 BUDGET

SUMMARY OF PROGRAM REQUIREMENTS

BUDGET ACTIVITY	Program Requirements Per Amended 1984 Budget	(In Thousands of Dollars)	
		Program Requirements Per 1985 Budget	Increase (+) or Decrease (-)
1. Ballistic Missiles	\$ 2,446,017	\$ 2,110,188	\$ -335,829
2. Other Missiles	2,031,330	2,145,888	+114,558
3. Modification of In-Service Missiles	134,250	137,350	+3,100
4. Spares and Repair Parts	362,149	332,119	-30,030
5. Other Support	3,085,384	3,086,293	-909
Reimbursable Program	129,300	226,800	+97,500
Total Fiscal Year Program	\$ 8,188,430	\$ 8,038,638	\$ -149,792

EXPLANATION OF CHANGES BY BUDGET ACTIVITY

- Ballistic Missiles (\$-335,829) Congress deleted funds for six Peacekeeper missiles (\$-335,829).
- Other Missiles (\$+114,558) Congress made the following program adjustments: GLCM, for tooling and test equipment amortization (\$-17,700); Maverick, for quantity reductions (\$-46,665); AMRAAM advance procurement, for quantity and concurrency constraints (\$-4,000); ALCM advance procurement, for ALCM-B long lead(\$+7,000); ALCM, as a result of FY 1983 airframe contract savings (\$-15,176); NATO air and air base defense (\$+200,000). In addition, an ALCM reprogramming action transferred funding to Budget Activity 3 (\$-8,900).
- Modification of In-Service Missiles (\$+3,100) Congressional adjustment deleted an ALCM Class V modification (\$-5,842). A reprogramming action (\$+8,900) to continue an ALCM update modification is included.

4. Spares and Repair Parts (\$-30,030) Congress directed a general spares program line reduction (\$-30,000). Differences in rounding in internal adjustments make up the balance.

5. Other Support (\$+909) Congressional action reduced a classified program line (\$-600) and transferred the manufacturing technology segment of the Industrial Facilities line to RDT&E (\$-7,480). A selected classified program was increased for classified requirements (\$+9,000). Roundouts and data entry differences make up the balance of the change.



COMPARISON OF FY 1984 FINANCING AS REFLECTED  
IN FY 1984 BUDGET WITH FY 1984 FINANCING AS  
SHOWN IN FY 1985 BUDGET

	Financing Per FY 1984 Amended Budget	(In Thousands of Dollars) Financing Per FY 1985 Budget	Increase (+) or Decrease (-)
Program Requirements.....	\$8,700,134	\$8,038,638	\$-661,496
Program Requirements (Service Account).....	8,570,834	7,811,838	-758,996
Program Requirements (Reimbursable).....	129,300	226,800	+97,500
Less:			
Anticipated Reimbursements.....	129,300	226,800	+97,500
Reappropriation.....	-	55,000	+55,000
Transfer from Other Accounts.....	-	9,000	+9,000
Appropriation.....	\$8,570,834	\$7,747,838	\$-822,966

EXPLANATION OF CHANGES IN FINANCING

The Fiscal Year 1984 program has decreased \$822,966 since submission of the FY 1984 budget. Adjustments by category are explained below:

1. Anticipated Reimbursements. The increase is due to a revised estimate of customer orders.
2. Reappropriation. The increase is due to a Congressionally directed transfer of FY 1983 unobligated balances for HARM (\$40,000) and Air Launched Cruise Missiles (\$15,000).
3. Transfer from Other Accounts. The increase (\$+9,000) is reprogramed from other accounts (OPAF) for a classified program.

COMPARISON OF FY 1983 PROGRAM REQUIREMENTS AS REFLECTED  
IN FY 1984 BUDGET WITH FY 1983 PROGRAM REQUIREMENTS AS  
SHOWN IN FY 1985 BUDGET

SUMMARY OF PROGRAM REQUIREMENTS

	(In Thousands of Dollars)		
	Program Requirements Per 1984 Budget	Program Requirements Per 1985 Budget	Increase (+) or Decrease (-)
<b>BUDGET ACTIVITY</b>			
1. Ballistic Missiles	\$ -	\$ -	\$ -
2. Other Missiles	1,872,300	1,759,090	-113,210
3. Modification of In-Service Missiles	91,300	95,210	+3,910
4. Spares and Repair Parts	208,200	190,000	-18,200
5. Other Support	2,786,900	2,762,300	-24,600
Reimbursable Program	251,300	246,879	-4,421
Total Fiscal Year Program	\$ 5,210,000	\$ 5,053,479	\$ 156,521

EXPLANATION BY BUDGET ACTIVITY

1. Ballistic Missiles No program.

2. Other Missiles (\$-113,210) A significant part of the decrease is comprised of transfers to FY 1984 from ALCM (\$-15,000) and HARM (\$-40,000). Other reprogramming adjustments include: transfer to ALCM modifications (\$-1,100); a Section 732 transfer to Military Personnel and Reserve Personnel (\$-19,200); a Section 732 transfer as a partial alternate source for a new start (\$-4,000); an ALCM advance procurement reduction for a transfer to RDT&E (\$-30,700); a Section 732 transfer to O&M (\$-2,000); a reduction as an alternate source for a Section 732 transfer to Defense Agencies (\$-1,000); a Tactical Drones adjustment for a reduced Section 732 new start transfer from Aircraft Procurement (\$-4,000) and offset by a reprogramming from ALCM (\$+4,000); other minor adjustments (\$-210).

3. Modification of In-Service Missiles (\$+3,910) Transfer to ALCM Class III modifications (\$+1,100) from ALCM weapon system by notification letter; reprogramming from the spares budget activity (\$+2,810) for Class IV modifications.

4. Spares and Repair Parts (\$-18,200) A Section 732 transfer to O&M (\$-15,400) caused the largest adjustment; a reprogramming action transferred funding (\$-2,810) to the Class IV segment of the modifications program line.

5. Other Support (\$-24,600) Section 732 transfer of funds from Space Launch Support Advance Procurement (CY) (\$-6,500) and Space Boosters Advance Procurement (CY) (\$-6,000) to Air Force RDT&E; Section 732 transfer from Defense Support Program (\$-8,000) and Defense Satellite Communication system (\$-1,300) to O&M, Air Force; a Section 732 transfer from Space Boosters (\$-3,000) to Military Personnel; other adjustments (\$+200).

COMPARISON OF FY 1983 FINANCING AS REFLECTED  
IN FY 1984 BUDGET WITH FY 1983 FINANCING AS  
SHOWN IN THE FY 1985 BUDGET

	Financing Per FY 1984 Budget	(In Thousands of Dollars) Financing Per FY 1985 Budget	Increase (+) or Decrease (-)
Program Requirements.....	\$ 5,210,000	\$ 5,053,479	\$ -156,521
Program Requirements (Service Account).....	4,958,700	4,806,600	-152,100
Program Requirements (Reimbursable).....	251,300	246,879	-4,421
Less:			
Anticipated Reimbursements.....	251,300	246,879	-4,421
Reappropriation.....	15,000	15,000	-
Transfers from Other Accounts.....	24,200	20,200	-4,000
Add:			
Transfers to Other Accounts.....	-	93,100	+93,100
Unobligated Balance to Finance Subsequent Year Budget Plans.....	-	55,000	+55,000
Reduction Pursuant to P.L. 97-377.....	21,600	21,600	-
Appropriation.....	\$ 4,941,100	\$ 4,941,100	-

EXPLANATION OF CHANGES IN FINANCING

The fiscal year 1983 net program remains unchanged since submission of the FY 1984 budget. Adjustments by category are explained below:

1. Anticipated Reimbursements. The decrease of \$4,421 is due to receipt of fewer customer orders than anticipated.
2. Transfers from Other Accounts. An anticipated transfer from APAF was reduced by \$4,000 based on SASC disapproval of sources.

3. Transfer to Other Accounts. Reprogramings (\$+93,100) are summarized as follows: \$30,700 to ALCM RDT&E from ALCM advance procurement; \$12,500 to Tactical Air Control System RDT&E from Space Boosters (\$6,000) and Space Launch Support (\$6,500); \$22,200 transferred to Military Personnel from ALCM (\$2,000), GLCM (\$1,000), AIM-9 (\$16,200), and Space Boosters (\$3,000); \$26,700 reprogramed to O&M from DSP (\$8,000), spares (\$15,400), DSCS (\$1,300), GLCM (\$1,000), and AIM-9 (\$1,000); \$1,000 to Defense Agencies from GLCM as an alternative source.

4. Unobligated Balance to Finance Subsequent Year. Transfers forward to FY 1984 were directed in the FY 1984 Appropriations Act in the ALCM program (\$15,000) and the AGM-88 HARM program (\$40,000).

MODIFICATION OF MISSILES  
FY-85 PROGRAM

FY-85 APPROPRIATION: MISSILES PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: SECURITY SYSTEM RETROFIT, MN-10505B

MODELS OF MISSILES AFFECTED: LGM-30F/G

DESCRIPTION/JUSTIFICATION: REPLACE AND UPDATE THE PRESENT SECURITY SYSTEM AT ALL SIX WINGS WITH AN UPDATED SECURITY SYSTEM. THE FALSE ALARM RATES WITH THE PRESENT SYSTEM ARE EXCESSIVE, RESULTING IN AN UNSUPPORTABLE WORKLOAD AND HIGH COSTS TO STRATEGIC AIR COMMAND. THE FALSE ALARM RATES WILL BE REDUCED IN EXCESS OF 80 PERCENT BY REPLACEMENT WITH THE UPDATED SYSTEM.

SCOPE OF PROGRAM:

	PRIOR		FY-84		FY-85		FY-86		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST	6	26.0	122	13.6	241	31.4	303	23.9	339	26.6	1011	121.5
ESTIMATE:												
NONRECURRING	6	22.1			2	5.8					8	27.9
KITS			122	11.9	239	21.2	303	23.9	339	26.6	1003	83.6
DATA		3.9				1.2						5.1
SUPPORT-EQUIP						1.5						1.5
SIM/TRAINER			(2)	1.7	(2)	1.7						3.4
TOTAL	6	26.0	122	13.6	241	31.4	303	23.9	339	26.6	1011	121.5

METHOD OF IMPLEMENTATION: INSTALLATION -- DEPOT  
LEAD TIME -- 15 MONTHS

MODIFICATION OF MISSILES  
FY-85 PROGRAM

FY-85 APPROPRIATION: MISSILES PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: SIGNAL DATA RECORDER UPDATE, MN-10519B

MODELS OF MISSILES AFFECTED: LGM-30

DESCRIPTION/JUSTIFICATION: THE CURRENT SIGNAL DATA RECORDER IN THE LAUNCH CONTROL FACILITY IS BECOMING NON SUPPORTABLE. THIS MOD WILL INTEGRATE A HIGH SPEED ELECTRONIC PRINTER AND NECESSARY INTERFACES INTO THE UPGRADED RECORDER.

SCOPE OF PROGRAM:

	PRIOR		FY-84		FY-85		FY-86		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST					1	7.7	24	2.5	64	7.5	89	17.7
ESTIMATE:												
NONRECURRING					1	4.0					1	4.0
KITS							24	2.5	64	7.5	88	10.0
DATA						2.4						2.4
SIM/TRAINER						1.3						1.3
TOTAL					1	7.7	24	2.5	64	7.5	89	17.7

METHOD OF IMPLEMENTATION. INSTALLATION -- DEPOT  
LEAD TIME -- 90 MONTHS

MODIFICATION OF MISSILES  
FY-85 PROGRAM

FY-85 APPROPRIATION: MISSILES PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: NS-17 UPGRADE, MN-10520B

MODELS OF MISSILES AFFECTED: LGM-30F

DESCRIPTION/JUSTIFICATION: THE PRODUCTION OF REPLACEMENT PARTS FOR THE NS-17 GUIDANCE AND CONTROL SYSTEM WAS DEACTIVATED IN 1975. THE AIR FORCE PURCHASED 10 YEARS OF HARDNESS CRITICAL PARTS TO SUSTAIN THE SYSTEM THROUGH 1985. THE NS-17 HAS BEEN USING THESE HARDNESS CRITICAL PARTS AT AN INCREASING RATE AND SUPPORT OF THE SYSTEM IN THE FY-84-85 TIME FRAME IS QUESTIONABLE. THIS MODIFICATION WILL DECREASE HARDNESS CRITICAL PARTS REQUIREMENTS TO ASSURE CONTINUING SUPPORTABILITY OF THE MINUTEMAN II WEAPON SYSTEM.

SCOPE OF PROGRAM:

	PRIOR		FY-84		FY-85		FY-86		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST	2	15.3	25	34.6	148	40.7	148	43.1	266	69.0	589	202.7
ESTIMATE:												
NONRECURRING	2	13.2									2	13.2
KITS			25	17.2	148	40.0	148	42.5	266	69.0	587	168.7
DATA		2.1		4.6		.6		.6				7.9
SUPPORT-EQUIP				12.1								12.1
SIM/TRAINER			(28)	.7		.1						.8
TOTAL	2	15.3	25	34.6	148	40.7	148	43.1	266	69.0	589	202.7

METHOD OF IMPLEMENTATION: INSTALLATION -- DEPOT  
LEAD TIME -- 24 MONTHS



MODIFICATION OF MISSILES  
FY-85 PROGRAM

FY-85 APPROPRIATION: MISSILES PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: HARDENED INTERSITE CABLE SYSTEM, MN-11501B

MODELS OF MISSILES AFFECTED: LGM-30

DESCRIPTION/JUSTIFICATION: THE HARDENED INTERSITE CABLE SYSTEM AND ITS ASSOCIATED SUBSYSTEMS HAVE DEGRADED TO A POINT THAT PIECEMEAL CORRECTIVE ACTIONS CANNOT SUSTAIN THE SYSTEM. MODIFICATION WILL INCLUDE REDESIGN OF PRESSURE CIRCUITS, INSTALLATION OF ABOVE GROUND PRESSURE CONTACTS, INSTALLATION OF POLE MOUNTED COMPRESSORS AND A MODIFIED FAULT ALARM SYSTEM.

SCOPE OF PROGRAM:

	PRIOR		FY-84		FY-85		FY-86		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	1761	14.0	1452	3.7	1358	6.2					4571	23.9
BASIS FOR COST												
ESTIMATE:												
NONRECURRING	53	6.3									53	6.3
KITS	1708	7.2	1452	3.6	1358	6.2					4518	17.0
DATA		.5										.5
SIM/TRAINER			(2)	.1								.1
TOTAL	1761	14.0	1452	3.7	1358	6.2					4571	23.9

METHOD OF IMPLEMENTATION: INSTALLATION -- DEPOT  
LEAD TIME -- 15 MONTHS

MODIFICATION OF MISSILES  
FY-85 PROGRAM

FY-85 APPROPRIATION: MISSILES PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: HF HARD ANTENNA SYSTEM, MN-12505B

MODELS OF MISSILES AFFECTED: LGM-30

DESCRIPTION/JUSTIFICATION: DUE TO AGE, AND ADVANCED STATE-OF-THE-ART, THE PRESENT HF ANTENNA SYSTEMS HAVE BECOME NON-SUPPORTABLE. THE PROGRAM WILL REPLACE THE CURRENT SYSTEM WITH A HARDENED, BROADBAND ANTENNA WHICH IS TUNABLE TO ASSIGNED FREQUENCIES. FAILURE OF EQUIPMENT WOULD RESULT IN NO POST-ATTACK HF COMMUNICATION CAPABILITIES.

SCOPE OF PROGRAM:

	PRIOR		FY-84		FY-85		FY-86		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST	3	4.9	20	9.4	80	9.9	21	2.5			124	26.7
ESTIMATE:												
NONRECURRING	3	4.5									3	4.5
KITS			20	2.4	80	9.9	21	2.5			121	14.8
DATA		.3		.1								.4
SUPPORT-EQUIP				.1								.1
SIM/TRAINER				2.7								2.7
TOOLING		.1		4.1								4.2
TOTAL	3	4.9	20	9.4	80	9.9	21	2.5			124	26.7

METHOD OF IMPLEMENTATION: INSTALLATION -- DEPOT  
LEAD TIME -- 30 MONTHS

MODIFICATION OF MISSILES  
FY-85 PROGRAM

FY-85 APPROPRIATION: MISSILES PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: PSRE ENGINE ACTUATOR ASSEMBLY, MN-12545B

MODELS OF MISSILES AFFECTED: LGM-30

DESCRIPTION/JUSTIFICATION: SERVICE LIFE TESTING ON THE ENGINE ACTUATORS HAS SHOWN THAT RESPONSE TIMES ARE DETERIORATING WITH TIME AND MUST BE UPGRADED TO INSURE SPECIFICATIONS ARE HELD. THE FAULTY COMPONENTS WILL BE REPLACED WITH ITEMS WITH LONGER EXPECTED SERVICE LIFE.

SCOPE OF PROGRAM:

	PRIOR		FY-84		FY-85		FY-86		OUTYEAR		TOTAL
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY
BASIS FOR COST					2	1.8	219	1.4	539	3.7	760
ESTIMATE:											6.9
NONRECURRING					2	1.5					2
KITS							219	1.4	539	3.7	758
DATA						.1					.1
SIM/TRAINER					(5)	.2					.2
TOTAL					2	1.8	219	1.4	539	3.7	760
											6.9

METHOD OF IMPLEMENTATION      INSTALLATION -- DEPOT  
LEAD TIME -- 30 MONTHS

MODIFICATION OF MISSILES  
FY-85 PROGRAM

FY-85 APPROPRIATION: MISSILES PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: MINUTEMAN III GUIDANCE SET UPGRADE, MN-13503B

MODELS OF MISSILES AFFECTED: LGM-30

DESCRIPTION/JUSTIFICATION: ( )

SCOPE OF PROGRAM:

	PRIOR		FY-84		FY-85		FY-86		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
TOTAL							1	10.0	746	195.0	747	205.0
BASIS FOR COST												
ESTIMATE:												
NONRECURRING							1	9.0			1	9.0
KITS									715	188.0	715	188.0
DATA							1.0			1.0		2.0
SUPPORT-EQUIP										1.0		1.0
SIM/TRAINER									31	5.0	31	5.0
TOTAL							1	10.0	746	195.0	747	205.0

METHOD OF IMPLEMENTATION: INSTALLATION -- DEPOT  
LEAD TIME -- 18 MONTHS

MODIFICATION OF MISSILES  
FY-85 PROGRAM

FY-85 APPROPRIATION MISSILES PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: WING 11 G&C COOLING SYSTEM, MN-13507B

MODELS OF MISSILES AFFECTED: LGM-30

DESCRIPTION/JUSTIFICATION: THIS MODIFICATION REPLACES THE CURRENT GUIDANCE AND CONTROL (G&C) COOLING SYSTEM AT WING 11. THE THERMO ELECTRIC (TE) CHILLER CURRENTLY INSTALLED IS NO LONGER PROCURABLE. IN ADDITION TO THE TE CHILLER, THE GUIDANCE AND CONTROL (G&C) CHILLER CAN ONLY BE SUPPORTED THRU 1984 DUE TO NON-AVAILABILITY OF THE COMPRESSOR. A NEW COOLING SYSTEM WILL BE INSTALLED TO MEET WING 11 REQUIREMENTS.

SCOPE OF PROGRAM:

	PRIOR		FY-84		FY-85		FY-86		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE	33	4.6	99	7.9	26	2.5					158	15.0
NONRECURRING		.8										.8
KITS	33	2.5	99	7.9	26	2.5					158	12.9
DATA		.2										.2
SIM/TRAINER		1.1										1.1
TOTAL	33	4.6	99	7.9	26	2.5					158	15.0

METHOD OF IMPLEMENTATION: INSTALLATION -- DEPOT  
LEAD TIME -- 20 MONTHS

MODIFICATION OF MISSILES  
FY-85 PROGRAM

FY-85 APPROPRIATION: MISSILES PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO. CODE INSERTER VERIFIER, MN-50242B

MODELS OF MISSILES AFFECTED: LGM-30

DESCRIPTION/JUSTIFICATION: UPGRADE EXISTING ELECTRICAL/MECHANICAL COMPONENTS WITHIN THE LOGIC AND POWER SUPPLY AND ENCODER DRAWERS WITH STATE-OF-THE-ART COMPONENTS. THIS WILL REDUCE AN UNACCEPTABLE EQUIPMENT DOWNTIME CAUSED BY THE INCREASED WEAROUT AND NONAVAILABILITY OF COMPONENTS DESIGNED IN THE MID 1960'S. WITHOUT UPDATING PROGRAM TO THE CIV, FUTURE MINUTEMAN MISSILE TAPE CHANGEOUTS MAY BE DELAYED.

SCOPE OF PROGRAM:

	PRIOR		FY-84		FY-85		FY-86		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE.							16	3 2			16	3 2
NONRECURRING								2				2
KITS							16	2 9			16	2 9
DATA								1				1
TOTAL							16	3 2			16	3 2

METHOD OF IMPLEMENTATION: INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 3 MONTHS

MODIFICATION OF MISSILES  
FY-85 PROGRAM

FY-85 APPROPRIATION: MISSILES PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: SIMULATOR COMM SYSTEM UPGRADE, MN-51171B

MODELS OF MISSILES AFFECTED: LGM-30

DESCRIPTION/JUSTIFICATION: THE CURRENT SIMULATOR COMMUNICATIONS SYSTEM DOES NOT ACCURATELY DEPICT THE WEAPON SYSTEM CONFIGURATION PRIMARILY BECAUSE OLD AND NEW ELECTRONIC DEVICES ARE INCOMPATIBLE. ADDITIONALLY, MANY OF THE OLDER PARTS ARE NO LONGER AVAILABLE THROUGH SUPPLY CHANNELS. THE SYSTEM WILL BE UPGRADED USING STATE-OF-THE-ART ELECTRONIC COMPONENTS AND DESIGN FEATURES.

SCOPE OF PROGRAM:

	PRIOR		FY-84		FY-85		FY-86		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
					5	2.8					5	2.8
BASIS FOR COST												
ESTIMATE:												
NONRECURRING					1	1.2					1	1.2
KITS					4	1.0					4	1.0
DATA						.6						.6
TOTAL					5	2.8					5	2.8

METHOD OF IMPLEMENTATION: INSTALLATION -- DEPOT  
LEAD TIME -- 12 MONTHS

MODIFICATION OF MISSILES  
FY-85 PROGRAM

FY-85 APPROPRIATION: MISSILES PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: COMPRESSOR FAILURE MONITOR, MN-52069B

MODELS OF MISSILES AFFECTED: LGM-30

DESCRIPTION/JUSTIFICATION: A MISSILE GUIDANCE SET (MGS) ELECTRICAL OVERSTRESS OCCURS AT WING 1, SQUADRON 20 WHEN THE POWER SUPPLY FAILS. THIS POWER SUPPLY FAILURE FOLLOWS A PREDICTABLE PATTERN WHEN COMMERCIAL POWER SURGES OCCUR. A SURGE MONITOR WILL BE INSTALLED WHICH WILL SHUT DOWN THE SYSTEM IN TIME TO ELIMINATE FAILURES.

SCOPE OF PROGRAM:

	PRIOR		FY-84		FY-85		FY-86		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST							205	6.3			205	6.3
ESTIMATE:												
NONRECURRING							1	.9			1	.9
KITS							204	5.1			204	5.1
DATA								.2				.2
SIM/TRAINER							(3)	.1				.1
TOTAL							205	6.3			205	6.3

METHOD OF IMPLEMENTATION: INSTALLATION -- DEPOT  
LEAD TIME -- 20 MONTHS



MODIFICATION OF MISSILES  
FY-85 PROGRAM

FY-85 APPROPRIATION: MISSILES PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: ERCS AMPLIFIER FREQUENCY MULTIPLIER, MN-52108B

MODELS OF MISSILES AFFECTED: LGM-30

DESCRIPTION/JUSTIFICATION: ( )

SCOPE OF PROGRAM:

	PRIOR		FY-84		FY-85		FY-86		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
TOTAL					1	1.0	12	5			13	1.5
BASIS FOR COST												
ESTIMATE:												
NONRECURRING					1	.9					1	.9
KITS							12	5			12	.5
DATA						.1						.1
TOTAL					1	1.0	12	5			13	1.5

METHOD OF IMPLEMENTATION: INSTALLATION -- DEPOT  
LEAD TIME -- 30 MONTHS

MODIFICATION OF MISSILES  
FY-85 PROGRAM

FY-85 APPROPRIATION MISSILES PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: LCF EMP HARDNESS PROTECTION, MN-53084B

MODELS OF MISSILES AFFECTED: LGM-30

DESCRIPTION/JUSTIFICATION THE MINUTEMAN HARDNESS SURVEILLANCE PROGRAM HAS IDENTIFIED SEVERAL EMP HARDNESS DEFICIENCIES IN THE PRESENT WS-133B CONFIGURATION. THIS MODIFICATION WILL SUBSTANTIALLY IMPROVE THE HARDNESS GROUNDING CONFIGURATION BY USING MULTIPLE GROUNDING TECHNIQUES.

SCOPE OF PROGRAM

	PRIOR		FY-84		FY-85		FY-86		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE					1	6.0	5	10.9	15	36.2	21	53.1
NONRECURRING					1	5.0					1	5.0
KITS							5	10.9	15	36.2	20	47.1
DATA						1.0						1.0
TOTAL					1	6.0	5	10.9	15	36.2	21	53.1

METHOD OF IMPLEMENTATION: INSTALLATION -- DEPOT  
LEAD TIME -- 40 MONTHS

MODIFICATION OF MISSILES  
FY-85 PROGRAM

FY-85 APPROPRIATION: MISSILES PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: INERTIAL PERFORMANCE DATA UPGRADE, MN-59208C

MODELS OF MISSILES AFFECTED: LGM-30

DESCRIPTION/JUSTIFICATION: THE INERTIAL PERFORMANCE DATA (IPD) MODEM COLLECTS, STORES AND FORWARDS MINUTEMAN STATUS DATA FROM THE LAUNCH CONTROL FACILITY TO USING ORGANIZATIONS. THIS DATA IS CONSIDERED CRITICAL TO ASSURE OPERATIONAL READINESS. THE CURRENT MODEM IS EXPERIENCING SERIOUS RELIABILITY & MAINTAINABILITY DEGRADATION WHICH IS INCREASING MISSILE DOWNTIME. A NEW MODEM WILL BE INSTALLED TO CORRECT THESE PROBLEMS.

SCOPE OF PROGRAM:

	PRIOR		FY-84		FY-85		FY-86		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST					1	4.0	80	4.1			81	8.1
ESTIMATE:												
NONRECURRING					1	3.0					1	3.0
KITS							80	4.1			80	4.1
DATA						.6						.6
SUPPORT-EQUIP						.4						.4
TOTAL					1	4.0	80	4.1			81	8.1

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 60 MONTHS

MODIFICATION OF MISSILES  
FY-85 PROGRAM

FY-85 APPROPRIATION: MISSILES PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: MISCELLANEOUS CLASS IV, MN-99999X

MODELS OF MISSILES AFFECTED: LGM-30

DESCRIPTION/JUSTIFICATION: THESE ARE LOW COST (UNDER \$900K EACH) AND ARE NECESSARY  
TO MEET MISSION REQUIREMENTS.

SCOPE OF PROGRAM:

	PRIOR		FY-84		FY-85		FY-86		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST	1	4.4			3.6		5.8				1	13.8
ESTIMATE:												
KITS	1	.8			3.6		5.8				1	10.2
MISSILES		3.6										3.6
TOTAL	1	4.4			3.6		5.8				1	13.8

METHOD OF IMPLEMENTATION: INSTALLATION -- DEPOT  
LEAD TIME -- 0 MONTHS

MODIFICATION OF MISSILES  
FY-85 PROGRAM

FY-85 APPROPRIATION: MISSILES PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: SOLID STATE GYRO BOARDS, MN-11619C

MODELS OF MISSILES AFFECTED: AIM-9

DESCRIPTION/JUSTIFICATION: THE AIM-9P GYRO DRIVE ELECTRONICS BOARDS HAVE BEEN MODIFIED NUMEROUS TIMES (B TO J TO P) AND CONSIST OF MANY AGED COMPONENTS AND TUBE ELECTRONICS. A COMPLETELY SOLID STATE-HIGH RELIABILITY-INTERCHANGABLE GYRO DRIVE BOARD IS AVAILABLE. REPLACEMENT OF THE OLD, ANTIQUATED BOARDS WITH THE NEW, HIGH RELIABILITY BOARDS WILL PRODUCE A SIGNIFICANT SAVINGS IN REPAIR COSTS AND REPAIR TIME AND INCREASE THE MTBF AND RELIABILITY OF THIS FIRST LINE WEAPON.

SCOPE OF PROGRAM:

	PRIOR		FY-84		FY-85		FY-86		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	1400	1.4	3600	3.5	500	.5					5500	5.4
KITS	1400	1.4	3600	3.5	500	.5					5500	5.4
TOTAL	1400	1.4	3600	3.5	500	.5					5500	5.4

METHOD OF IMPLEMENTATION: INSTALLATION -- DEPOT  
LEAD TIME -- 12 MONTHS

MODIFICATION OF MISSILES  
FY-85 PROGRAM

FY-85 APPROPRIATION: MISSILES PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: CURRENT SUPPRESSOR HARDNESS UPDATE, MN-53085B

MODELS OF MISSILES AFFECTED: LGM-30

DESCRIPTION/JUSTIFICATION: THE HARDNESS SURVEILLANCE PROGRAM TESTING HAS SHOWN THAT THE DIODE  
CURRENT SUPPRESSOR IS INADEQUATE. GREATER CURRENT CAPACITY DIODES WILL BE INSTALLED

SCOPE OF PROGRAM:

	PRIOR		FY-84		FY-85		FY-86		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST					1	2.3	240	2.2	560	5.6	801	10.1
ESTIMATE:												
NONRECURRING					1	2.0					1	2.0
KITS							240	2.2	560	5.6	800	7.8
DATA						.3						.3
TOTAL					1	2.3	240	2.2	560	5.6	801	10.1

METHOD OF IMPLEMENTATION: INSTALLATION -- DEPOT/FIELD TEAM  
LEAD TIME -- 90 MONTHS

MODIFICATION OF MISSILES  
FY-85 PROGRAM

FY-85 APPROPRIATION: MISSILES PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: MISC CLASS IV

MODELS OF MISSILES AFFECTED: AGM-45

DESCRIPTION/JUSTIFICATION: THESE ARE LOW COST (UNDER \$900K EACH) AND ARE NECESSARY TO MEET  
MISSION REQUIREMENTS.

SCOPE OF PROGRAM:

	PRIOR		FY-84		FY-85		FY-86		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST					1	.7		1.1			1	1.8
ESTIMATE:												
KITS					1	.7		1.1			1	1.8
TOTAL					1	.7		1.1			1	1.8

METHOD OF IMPLEMENTATION: INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 12 MONTHS

MODIFICATION OF MISSILES  
FY-85 PROGRAM

FY-85 APPROPRIATION: MISSILES PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: MISC CLASS IV, MN-99999A

MODELS OF MISSILES AFFECTED: BQM-34

DESCRIPTION/JUSTIFICATION: THESE ARE LOW COST (UNDER \$200K EACH) AND ARE NECESSARY  
TO MEET MISSION REQUIREMENTS AND REDUCE LOGISTICS COSTS.

SCOPE OF PROGRAM:

	PRIOR		FY-84		FY-85		FY-86		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST		.5		.2		.2		.2		.9		2 0
ESTIMATE:												
KITS		.4										4
KITS		.1		.2		.2		.2		.9		1 6
TOTAL		.5		.2		.2		.2		.9		2 0

METHOD OF IMPLEMENTATION: INSTALLATION -- DEPOT/FIELD TEAM  
LEAD TIME -- 0 MONTHS



MODIFICATION OF MISSILES  
FY-85 PROGRAM

FY-85 APPROPRIATION: MISSILES PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: MISC CLASS IV

MODELS OF MISSILES AFFECTED: GLCM

DESCRIPTION/JUSTIFICATION: THESE ARE LOW COST RELIABILITY AND MAINTAINABILITY (UNDER \$900K)  
MODIFICATIONS AND ARE NECESSARY TO MEET MISSION REQUIREMENTS AND REDUCE LOGISTICS COSTS

SCOPE OF PROGRAM:

	PRIOR		FY-84		FY-85		FY-86		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST												
ESTIMATE:							3.1		3	33.2	3	36.3
KITS							(0)	3.1	3	33.2	3	36.3
TOTAL							3.1		3	33.2	3	36.3

METHOD OF IMPLEMENTATION: INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 0 MONTHS

MODIFICATION OF MISSILES  
FY-85 PROGRAM

FY-85 APPROPRIATION: MISSILES PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: GROUNDWAVE EMERGENCY NETWORK (GWN)

MODELS OF MISSILES AFFECTED: LGM-30

DESCRIPTION/JUSTIFICATION: GWN WILL PROVIDE US STRATEGIC FORCES, MISSILE WARNING SITES, AND  
COMMAND CENTERS WITH THE ABILITY TO MAINTAIN CRITICAL, LONG RANGE CONNECTIVITY IN THE NUCLEAR  
ENVIRONMENT. SYSTEM CONSISTS OF A NETWORK OF UNMANNED RADIO RELAY STATIONS AND USER TERMINALS

SCOPE OF PROGRAM:

	PRIOR		FY-84		FY-85		FY-86		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST							51	8.5	50	9.4	101	17.9
ESTIMATE:												
NONRECURRING							1	.1			1	.1
KITS							50	8.2	50	9.4	100	17.6
DATA								.2				.2
TOTAL							51	8.5	50	9.4	101	17.9

METHOD OF IMPLEMENTATION: INSTALLATION -- DRG//INTERMEDIATE  
LEAD TIME -- 12 MONTHS

MODIFICATION OF MISSILES  
FY-85 PROGRAM

FY-85 APPROPRIATION: MISSILES PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: ALCM SUPPORT EQUIPMENT

MODELS OF MISSILES AFFECTED: AGM-86

DESCRIPTION/JUSTIFICATION: INCORPORATION OF THE COMMON STRATEGIC ROTARY LAUNCHER INTO THE B-52H WILL REQUIRE MODIFICATION TO ALCM UNIQUE SUPPORT EQUIPMENT AND TEST SETS. SPECIFIC ITEMS TO BE MODIFIED ARE: 1) PYLON LAUNCHER CHECKOUT FRAMES (21 UNITS); 2) MISSILE LOADER TRAILERS (26 UNITS); 3) LAUNCHER LOADER ADAPTERS (103 UNITS); 4) ELECTRONIC SYSTEMS TEST SETS (85 UNITS). THE TOTAL BUY OF LAUNCHERS IS 103 UNITS

SCOPE OF PROGRAM:

	PRIOR		FY-84		FY-85		FY-86		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST					5.7		11.3		51.0			68.0
ESTIMATE:												
NONRECURRING					.3							.3
DATA					1.7							1.7
SUPPORT-EQUIP					3.7		11.3		51.0			66.0
TOTAL					5.7		11.3		51.0			68.0

METHOD OF IMPLEMENTATION: INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 15 MONTHS

MODIFICATION OF MISSILES  
FY-85 PROGRAM

FY-85 APPROPRIATION: MISSILES PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: GROUND LAUNCHED CRUISE MISSILE UPDATE

MODELS OF MISSILES AFFECTED: BGM-109 GLCM

DESCRIPTION/JUSTIFICATION: MISSILES REQUIRE CHANGES TO CORRECT DEFICIENCIES REVEALED DURING OPERATIONAL TESTING AND INITIAL USE. CORRECTIONS ARE INCORPORATED IN PRODUCTION AT THE EARLIEST TIME. UPDATE MODIFICATIONS ARE REQUIRED TO MAINTAIN CONFIGURATION CONTROL OF DELIVERED MISSILES AND THOSE TOO FAR INTO PRODUCTION FOR INCORPORATION.

SCOPE OF PROGRAM:

	PRIOR		FY-84		FY-85		FY-86		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:												
KITS	3.7		1	19.3	1	26.8	1	16.6	3	79.1	6	145.5
TOTAL	3.7		1	19.3	1	26.8	1	16.6	3	79.1	6	145.5

METHOD OF IMPLEMENTATION: INSTALLATION -- DEPOT  
LEAD TIME -- 0 MONTHS

MODIFICATION OF MISSILES  
FY-85 PROGRAM

FY-85 APPROPRIATION MISSILES PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO ALCM UPDATE

MODELS OF MISSILES AFFECTED AGM-86

DESCRIPTION/JUSTIFICATION: MISSILES REQUIRE CHANGES TO CORRECT DEFICIENCIES REVEALED DURING OPERATIONAL TESTING AND INITIAL USE CORRECTIONS ARE INCORPORATED IN PRODUCTION AT THE EARLIEST TIME UPDATE MODIFICATIONS ARE REQUIRED TO MAINTAIN CONFIGURATION CONTROL OF DELIVERED MISSILES AND THOSE TOO FAR INTO PRODUCTION FOR INCORPORATION.

SCOPE OF PROGRAM

	PRIOR		FY-84		FY-85		FY-86		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST		1.1		8.9		8.4		7.3		4.2		29.9
ESTIMATE												
MISSILES		1.1		8.9		8.4		7.3		4.2		29.9
TOTAL		1.1		8.9		8.4		7.3		4.2		29.9

METHOD OF IMPLEMENTATION: INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 12 MONTHS

AF PLANTS  
 PE 78011F  
 IN-CEILING  
 DD FORMS 1391  
 (\$ in Millions)

Appropriation 3020

	<u>Amount</u>
1. AFP 44: Power Substation	3.900
2. GOCO Plants (Missile) NCP Response Actions	0.100
Total:	4.000

NOTE: Funding for all of the above projects has been provided to the Air Force out of the Defense Environmental Restoration Account, established by the FY 1984 Appropriation Act.

1 COMPONENT USAF		FY 19_85		FACILITY PROJECT DATA		2 DATE 27 Jan 84	
3 INSTALLATION AND LOCATION APP 44 Hughes - Tucson AZ				4 PROJECT TITLE Power Substation MPC 7000			
5 PROGRAM ELEMENT PE 78011F		6 CATEGORY CODE 813-231		7 PROJECT NUMBER		8 PROJECT COST (\$000) \$3,900.0	
9 COST ESTIMATES							
ITEM				U/M	QUANTITY	UNIT COST	COST (\$000)
Title II A&E Design, Construction of Substation Expansion (Phase II)				LS			3,900.0
(Appropriation 3020)							
10 DESCRIPTION OF PROPOSED CONSTRUCTION							
<p>Project will continue construction of substation expansion (Phase II) to provide electrical power and distribution to the planned new industrial waste treatment facility, reclamation wells, and disposal systems.</p> <p><b>BASIS OF NEED:</b></p> <p>This additional power is required to support the new industrial waste treatment plant, reclamation wells, and disposal systems for cleanup of the contaminated groundwater aquifer at Air Force Plant 44, Tucson, AZ.</p> <p><b>NOTE:</b> Funding for this project has been provided to the Air Force out of the Defense Environmental Restoration Account, established by the FY 1984 Appropriation Act.</p>							

1 COMPONENT USAF		FY 19_85		FACILITY PROJECT DATA		2 DATE 27 Jan 84	
3 INSTALLATION AND LOCATION GOCO Plants				4 PROJECT TITLE National Contingency Plan Response Actions MPC 7000			
5 PROGRAM ELEMENT PE 78011F		6 CATEGORY CODE		7 PROJECT NUMBER		8 PROJECT COST (\$000) \$100.0	
9 COST ESTIMATES							
ITEM				U/M	QUANTITY	UNIT COST	COST (\$000)
National Contingency Plan Response Actions				LS			100.0
(Appropriation 3020)							
10 DESCRIPTION OF PROPOSED CONSTRUCTION							
<p>Immediate response to releases/potential releases of hazardous substances at GOCO plants. These responses could include minor construction.</p> <p>BASIS OF NEED:</p> <p>Necessary for Air Force to fulfill its statutory responsibilities under CERCLA.</p> <p><u>NOTE:</u> Funding for these projects has been provided to the Air Force out of the Defense Environmental Restoration Account, established by the FY 1984 Appropriation Act.</p>							



AF PLANTS

PE 78011F

IN-CEILING

DD FORMS 1391

(\$ in Millions)

Appropriation 3020

	<u>Amount</u>
1. AFP 44:	
Flammable Storage Facility	0.112
Expand Restroom	0.015
Provide New HVAC System	0.080
Alter Security Lighting	0.016
Fuel Storage Tank	0.030
Concrete Tunnel for Hazardous Waste	5.100
2. AFP 78:	
Install Canopy	0.077
Asphalt Approaches	0.066
Modify 510 Sprinkler	0.018
Forklift road	0.043
3. Generic Minor Construction	0.050

1 COMPONENT USAF		FY 1985		FACILITY PROJECT DATA		2 DATE 24 Jul 83	
3 INSTALLATION AND LOCATION AFP 44 Hughes - Tucson, AZ				4 PROJECT TITLE Add to Flammable Storage Facility MPC 1000			
5 PROGRAM ELEMENT 78011F		6 CATEGORY CODE 222-222		7 PROJECT NUMBER		8 PROJECT COST (\$000) \$112	
9 COST ESTIMATES							
ITEM				U/M	QUANTITY	UNIT COST	COST (\$000)
Add to Flammable Storage Facility				LS			\$112
10 DESCRIPTION OF PROPOSED CONSTRUCTION Provides an additional 2250 SF (approx.) space to existing Flammable Storage Facility, Building 829. Building would be a pre-engineered insulated metal building complete with HVAC, lighting, and power.							
BASIS OF NEED Existing facilities at Building No. 829 Flammable Storage provides wind and solar protection only. This allows the stored items to be exposed to temperature extremes, which is inadequate for the new generation products Hughes is now using. These products must be stored in a controlled stable environment or be disposed of due to exposure. Present conditions, including overcrowding of Building 829, force these items to be placed outside in the sunlight-inevitably causing rapid decay of shelf life and premature disposal. Provisions need to be made to alleviate the needless waste of these delicate flammable materials.							

1 COMPONENT USAF		FY 1985		FACILITY PROJECT DATA		2 DATE 24 Jul 83	
3 INSTALLATION AND LOCATION AFP 44 Hughes - Tucson AZ				4 PROJECT TITLE Add and Alter Restrooms, Bldg #7 MFG 1000			
5 PROGRAM ELEMENT 78011F		6 CATEGORY CODE 222-222		7 PROJECT NUMBER		8 PROJECT COST (\$,000) \$15	
9 COST ESTIMATES							
ITEM				U/M	QUANTITY	UNIT COST	COST (\$,000)
Expand restrooms				LS			15
10 DESCRIPTION OF PROPOSED CONSTRUCTION							
<p><u>DESCRIPTION OF REQUIREMENT</u></p> <p>Provides expansion of the Women's Restroom at Building No. 870, PACO Area, and required modifications to the Men's Restroom in order to accommodate the required expansion.</p> <p><u>BASIS OF NEED</u></p> <p>Prior to November 1981, Bldg #70 was used in low production rates. Increases in the PW Program have resulted in overflow work and high production rates being moved to this facility. The present restroom facilities are insufficient to accommodate the larger work force and are currently in violation of code requirements for minimum required facilities.</p>							

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PAGE NO

1 COMPONENT FY 1985		FACILITY PROJECT DATA		2 DATE 24 Jul 83	
3 INSTALLATION AND LOCATION AFB 44 Bldg 870, T.O.W. Bldg			4 PROJECT TITLE Provide HVAC System, Bldg 870, MPC 1000		
5 PROGRAM ELEMENT P-111	6 CATEGORY CODE 222-222	7 PROJECT NUMBER	8 PROJECT COST (\$000) 81.1		
9 COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT COST	COST \$/000
Provide new HVAC System		LS			81.1
10 DESCRIPTION OF PROPOSED CONSTRUCTION					
<p><u>DESCRIPTION OF REQUIREMENT</u></p> <p>Building No. 870 in FACC was recently converted from a storage building to a Final Assembly and Crating Facility for the <b>TOW missile</b>. The present air conditioning system can not meet the needed space conditions needed for final assembly of missiles.</p> <p>It is proposed to replace the present system at Building 870 with an indirect direct evaporative system. This system would remove equipment heating loads and provide an acceptable environmental temperature. Additionally, the ceiling and exterior walls of Building 870 would be insulated to minimize radiant heat flow and reduce energy consumption.</p> <p><u>BASIS OF NEED</u></p> <p>There have been many complaints due to the inadequacy of the original air conditioning system during the summer months. The present evaporate cooling does not provide acceptable space conditions for missile assembly.</p>					

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1. COMPONENT DESA		FY 19 <del>82</del> <sup>83</sup>		FACILITY PROJECT DATA		2. DATE 24 Jul 83	
3. INSTALLATION AND LOCATION APT 44 Hughes - Tucson, AZ				4. PROJECT TITLE Alter Security Lighting MPC 1000			
5. PROGRAM ELEMENT DR-111P		6. CATEGORY CODE LSD-222		7. PROJECT NUMBER		8. PROJECT COST (\$000) \$16.0	
9. COST ESTIMATES							
ITEM				U/M	QUANTITY	UNIT COST	COST (\$000)
Alter Security Lighting				LS			\$16
10. DESCRIPTION OF PROPOSED CONSTRUCTION							
<p><u>DESCRIPTION OF REQUIREMENTS</u></p> <p>Provides upper radiation shielding and filtering on all pole-mounted exterior mercury vaporlight fixtures in the FACO (final assembly and check-out) area.</p> <p><u>BASIS OF NEED</u></p> <p>The present security lighting fixtures in the FACO Area do not have upper radiation light shields and filters, which is in violation of the Pima County Lighting Ordinance for Mercury Vapor Light Fixtures. <b>This ordinance was established in an attempt to prevent the disruption of nighttime research carried out at the Kitt Peak Observatory near Tucson.</b></p>							

1 COMPONENT USAF		FY 19 85		FACILITY PROJECT DATA		2 DATE 24 JUL 85	
3 INSTALLATION AND LOCATION AFF 44 Hughes - TUCSON AZ				4 PROJECT TITLE Fuel Storage Tank, MPC 1000			
5 PROGRAM ELEMENT 78011F		6 CATEGORY CODE 722-721		7 PROJECT NUMBER		8 PROJECT COST \$0000 \$30	
9 COST ESTIMATES							
ITEM				QTY	QUANTITY	UNIT COST	COST \$000
Fuel Storage Tank				1			\$30.0
10 DESCRIPTION OF PROPOSED CONSTRUCTION							
<p><u>DESCRIPTION OF WORK</u></p> <p>Provide a four thousand (4,000) gallon diesel fuel bulk storage tank on the west side of Bldg 833 near the existing gasoline pump. Installation will be above ground and confined within a concrete basin. A fueling nozzle and tank liquid level indicator will also be included. Provision will be made for automatic shut-off of pump suction line in the event of fire within the basin. A remote pump shut-off valve will be provided so that any fire within the dispensing pump will result in automatic termination of flow to the pump.</p> <p><u>BASIS OF NEED</u></p> <p>Plant No. 44 presently has no facility to refuel diesel-powered vehicles. Fuel is purchased, when needed, by the individual tankfill from a trucking company seven (7) miles away. It is anticipated that purchasing diesel fuel in bulk for dispensing to vehicles on site will result in substantially lower fuel costs. Time spent for off-site refueling will be eliminated, resulting in additional savings.</p>							

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1. ORGANIZATION		2. DATE	
USAF		FY 1985	
FACILITIES		PROJECT DATA	
3. LOCATION AND LOCATION		4. PROJECT TITLE	
AFP 44 Hughes Tucson Tucson, AZ		Environmental, MPC 7000	
5. PHASE ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST (\$000)
78011F	831-155		\$5,100
9. COST ESTIMATES			
ITEM	U M	QUANTITY	COST \$000
Concrete Tunnel for Hazardous Waste			\$5,100
10. DESCRIPTION OF PROPOSED CONSTRUCTION			
<p>Construct a concrete tunnel for general industrial waste water, chromic acid waste, and cyanide waste. Pipes are underground and no easy capability exists for detecting leakage. By encasing pipes in a tunnel, leaks can be readily detected and spillage prevented. Lines must be encased to bring the system in compliance with RCRA, Part B.</p>			

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1 COMPONENT DEAF		FY 1985		FACILITY PROJECT DATA		2 DATE 24 Jul 83	
3 INSTALLATION AND LOCATION APT 7, Morton Thielke Corp Brimham City, UT				4 PROJECT TITLE Canopy Over Mix Bowl Dock M-504 MFC 100			
5 PROGRAM ELEMENT 1-0110		6 CATEGORY CODE 222-227		7 PROJECT NUMBER		8 PROJECT COST (\$000) 577	
9 COST ESTIMATES							
ITEM				U/M	QUANTITY	UNIT COST	COST (\$000)
Install Canopy Over Mix Bowl Dock							77
10 DESCRIPTION OF PROPOSED CONSTRUCTION							
<p>Build a canopy over the mix bowl dock on the northwest corner of Building M-504 and install a new roll-up door with electric door opener. Project cost included A &amp; B services.</p> <p><u>BASIC NEEDS</u></p> <p>The mix bowl dock area needs to be covered to prevent the accumulation of ice and snow during the winter. This will provide a safer working place for the initial phases of cleaning mix bowls. The roll-up door is required to replace sliding doors that are very inefficient and unsafe.</p>							



1. COMPONENT <b>USAF</b>		2. DATE <b>24 Jul 83</b>	
3. FACILITIES <b>FY 1985</b>		4. PROJECT DATA <b>PROJECT TITLE Buildup Asphalt Approaches to Bldgs M-591 to 593, M-600, M-689 MPC 1000</b>	
3. INSTALLATION AND LOCATION <b>AFP 78, Morton Thiokol Corp Brigham City, UT</b>		4. PROJECT TITLE <b>Buildup Asphalt Approaches to Bldgs M-591 to 593, M-600, M-689 MPC 1000</b>	
5. PHASE ELEMENT <b>78011F</b>	6. CATEGORY CODE <b>222-227</b>	7. PROJECT NUMBER	8. PROJECT COST (\$000) <b>66</b>
9. COST ESTIMATES			
ITEM	U M	QUANTITY	COST (\$000)
Buildup Asphalt Approaches to Bldgs M-591 to 593, M-600, M-689	LS		66
10. DESCRIPTION OF PROPOSED CONSTRUCTION			
<p>Build up the approaches, with 8" asphalt 20' x 200' (approx.), at the following locations: M-689, south rail only, west and east side; M-591; M-592; M-593; M-600.</p> <p>Project cost includes A &amp; E services.</p> <p>BASIS OF NEED: The build-up of the approaches will allow motorized hydraulic jacks to level and support a loaded missile trailer without the necessity of disconnecting the semi-tractor and trailer. In this way, the trailer will not be entirely supported by jacks: in case of either hydraulic or jack failure, the trailer will be supported by the asphalt approach itself, preventing the possibility of damage to missiles, equipment, or attending personnel.</p>			

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1 COMPONENT USAF		FY 19 <sup>85</sup>		FACILITIES		PROJECT DATA		2 DATE 24 Jul 83	
3 INSTALLATION AND LOCATION AFP 78 Morton Thiokol Brigham City UT						4 PROJECT TITLE Expansion, MPC 1000			
5 PROGRAM ELEMENT 78011F		6 CATEGORY CODE 226-227		7 PROJECT NUMBER		8 PROJECT COST (\$000) \$19			
9 COST ESTIMATES									
ITEM				U/M	QUANTITY	UNIT COST	COST (\$000)		
Install/modify E-510 Fire Sprinkler System							1-		
10 DESCRIPTION OF PROPOSED CONSTRUCTION									
Modify Bldg E-510 Sprinkler System to make the building acceptable for storage of flammable material.									

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1 COMPONENT USAF		FY 1985		FACILITIES		PROJECT DATA		2 DATE 24 Jul 83	
3 INSTALLATION AND LOCATION AFP 78 Morton Thiokol Brigham City UT						4 PROJECT TITLE Expansion, MPC 1000			
5 PROGRAM ELEMENT 78011F		6 CATEGORY CODE 226-227		7 PROJECT NUMBER		8 PROJECT COST (\$000) \$43			
9 COST ESTIMATES									
ITEM				U/M	QUANTITY	UNIT COST	COST (\$000)		
Construct a Forklift road							43		
10 DESCRIPTION OF PROPOSED CONSTRUCTION									
Construct a road for forklift traffic on the inplant road in the inert area of AFP 78. Due to increased vehicular traffic at the plant, a separate roadway is required to avoid traffic safety bottlenecks and prevent damage to costly components being handled at this site.									

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1. COMPONENT USAF		2. DATE FY 1985		FACILITIES		PROJECT DATA	
3. INSTALLATION AND LOCATION Various AF Industrial Facilities				4. PROJECT TITLE Minor Rearrangement Construction			
5. PROGRAM ELEMENT 78011F		6. CATEGORY CODE 222-222		7. PROJECT NUMBER		8. PROJECT COST (\$000) 50.0	
9. COST ESTIMATES							
ITEM				U. M.	QUANTITY	UNIT COST	COST (\$000)
Real Property Minor Construction and Alteration				LS			50.0
<p>10. DESCRIPTION OF PROPOSED CONSTRUCTION Project provides for minor construction and alteration of real property at various Air Force owned missile manufacturing activities and is required to provide funds and approval authority necessary to accommodate unanticipated real property modifications required to support production line rearrangements or modifications.</p> <p><b>BASIS OF NEED:</b> Between budget cycles directed program or production changes required for new rates, fabrication techniques or more efficient operations dictate minor real property alteration or construction. The majority of work efforts associated with production changes involve relocation or installation of severable equipment, accessories and auxiliary items involving secondary utilities which are classified as rearrangements (AFR 78-22). Many times a portion of these rearrangement projects involve some real property minor construction or alteration (installation of new ventilation, modifications to air conditioning and lighting systems, relocation or installation of permanent walls and doors). In accordance with Department of Defense Instruction 7040.5, real property portions of rearrangement projects which alter or modify real property installed equipment or systems or extend facilities are funded as investment capital, regardless of cost. All Air Force owned facilities investment costs must be funded by the Government.</p> <p>Disapproval of this project will eliminate authorization and funding necessary for minor construction/alteration of the real property portions of unanticipated directed or desired rearrangement factory projects. Lack of capability to improve manufacturing efficiencies and economies will cause production delays and increase operating costs.</p>							

DD FORM 1391

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